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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LEE, SHUN K

ART UNIT	PAPER NUMBER
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2884

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/02/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/02/2007.

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mailroom@bskb.com

Office Action Summary

Application No.

09/806,457

Applicant(s)

CASPERSEN, CHRISTIAN

Examiner

Shun Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7,9,11,12,15,16,23-25,27,29,36,37,40,44,45 and 47-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7,9,11,12,15,16,23-25,27,29,36,37,40,44,45 and 47-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 January 2007 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 7, 9, 11, 12, 23-25, 27, 29, 36, 37, 40, 44, 45, and 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reber *et al.* (US 6,110,748) in view of Gordon (US 5,892,577), Ekins *et al.* (Multianalyte microspot immunoassay-microanalytical "compact disk" of the future, Clinical Chemistry, Vol. 37, no. 11 (1991), pp. 1955-1967), and Virtanen (US 6342349).

The claim limitation "scanning means for scanning the specimen in relation to the detector" is being treated under 35 U.S.C. 112, sixth paragraph and has been construed to cover the corresponding structure described in the specification (e.g., "The scanning means may comprise a DC motor and a spindle rigidly connected to the DC motor" in lines 32-33 on pg. 4 and

"The scanning means may also comprise deflecting means that may comprise a servo motor or a stepper motor connected to the member holding the specimen and thereby adapted to scan the first light beam along a radius of the circular movement of the disc holding the specimen" in lines 2-5 on pg. 5) and equivalents thereof (MPEP § 2181).

The claim limitation "means for rotating the member" is being treated under 35 U.S.C. 112, sixth paragraph and has been construed to cover the corresponding structure described in the specification (*e.g.*, "The scanning means may comprise a DC motor and a spindle rigidly connected to the DC motor" in lines 32-33 on pg. 4) and equivalents thereof (MPEP § 2181).

The claim limitation "means for displacing the member along a radius of the rotation of the member" is being treated under 35 U.S.C. 112, sixth paragraph and has been construed to cover the corresponding structure described in the specification (*e.g.*, "The scanning means may also comprise deflecting means that may comprise a servo motor or a stepper motor connected to the member holding the specimen and thereby adapted to scan the first light beam along a radius of the circular movement of the disc holding the specimen" in lines 2-5 on pg. 5) and equivalents thereof (MPEP § 2181).

The claim limitation "scanning control means for controlling the scanning means for scanning the specimen" is being treated under 35 U.S.C. 112, sixth paragraph and has been construed to cover the corresponding structure described in the specification (*e.g.*, "The scanning control means may comprise servo means adapted control the rpm of the disc, to produce a substantially constant linear velocity of the laser spot on the disc surface, a principle well known from CD players" in lines 27-29 on pg. 16) and equivalents thereof (MPEP § 2181).

The claim limitation "storage means for storing detector signals relating to the marked objects provided by the detector and corresponding position signals provided by the scanning control means" is being treated under 35 U.S.C. 112, sixth paragraph and has been construed to cover the corresponding structure described in the specification (e.g., "The storage means may comprise magnetic, optic or electric storage media, such as hard disc drives, DAT-tapes, floppy discs, CD-ROM discs, EEPROMs, etc. which may be utilised for non-volatile storage of the coherent data sets obtained from the scanning of the specimen(s). The storage means may also comprise intermediate volatile storage means, preferably RAM, to store coherent data sets during the scanning" in lines 9-14 on pg. 14) and equivalents thereof (MPEP § 2181).

The claim limitation "means for retrieving the position signals stored in the storage means" is being treated under 35 U.S.C. 112, sixth paragraph and has been construed to cover the corresponding structure described in the specification (e.g., "The storage means may be located in a personal computer (PC), which is operationally connected with the apparatus of the present invention" in lines 8-9 on pg. 14) and equivalents thereof (MPEP § 2181).

In regard to claims **1** and **48**, Reber *et al.* disclose (Fig. 1) an apparatus comprising:

- (a) a frame (is inherent in positioning mechanism 42; column 4, lines 17-28);
- (b) a member (20) positioned on the frame and having a surface that is adapted to receive and hold the specimen (column 2, line 28 to column 3, line 7);
- (c) at least a first light source is inherent for emitting at least a first light beam towards the specimen (e.g., fluorescent members; column 3, lines 43-47) held by the

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member (20) since fluorescence is defined¹ as the "emission of electromagnetic radiation, especially of visible light, stimulated in a substance by the absorption of incident radiation and persisting only as long as the stimulating radiation is continued";

- (d) at least a detector (38) for detecting a light (*i.e.*, fluorescence) emitted from the marked objects (*i.e.*, fluorescent members; column 3, lines 43-47) upon interaction with the first light beam;
- (e) scanning means (42) for scanning the specimen in relation to the detector (38) along a non-linear curve (*e.g.*, spiral 152 in Fig. 12), wherein the scanning means comprises means (*i.e.*, rotary positioning mechanism; column 4, lines 17-28; column 9, lines 37-40) for rotating the member and means (*i.e.*, translational positioning mechanism; column 4, lines 17-28; column 9, lines 37-40) for displacing the member, so as to identify the position (*i.e.*, for random access; column 5, lines 1-9) of the marked objects and detect the property of the marked objects in the entire specimen, the means for rotating and the means for displacing being directly connected to the member (*i.e.*, a rotary positioning mechanism such as a spindle or a turntable, a translational positioning mechanism such as a conveyor, and/or a multiple degree of freedom positioning mechanism such as a robotic arm; column 4, lines 17-28), the member being rotatable and displaceable (*i.e.*, the step of positioning at least one of the device 20 and the detector 38 can include translating the device 20, rotating the device 20, translating the detector 38, and/or rotating the detector 38; column 9, lines 37-40); and

¹ The American Heritage® Dictionary of the English Language, Third Edition copyright © 1992 by

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(f) scanning control means (e.g., processor 36) for controlling the scanning means

(42) for scanning the specimen along the non-linear curve (column 5, lines 1-9).

The apparatus of Reber *et al.* lacks an explicit description of a means for retrieving angular and radial coordinate position signals from a storage means wherein the scanning control means uses the retrieved position signals to place a microscope for viewing (i.e., optical inspection of) images at the position of the marked objects to allow performing a detailed examination of the marked objects so as to establish identity wherein the position signals stored in the storage means correspond to marked object detector signals stored in the storage means and wherein the first light source and the detector are arranged so that a 20-150 μm diameter light spot is provided by the first light beam on the specimen and a part of a light beam path from the first light source to the specimen is co-axial with a part of the light emitted from the marked objects with the member displaced along a radius of the member rotation. However, Reber *et al.* also disclose (column 3, line 56 to column 4, line 10) that the apparatus comprises a detector 38 wherein positioning mechanisms (column 5, lines 1-9) are operated to collect data in a sequential manner from sites along annular (e.g., circular 140 in Fig. 11) or spiral (e.g., spiral 152 in Fig. 12) tracks (column 3, lines 5-7). It should be noted that a spiral track is generated by relative translation along a radius of the rotary movement. Since Reber *et al.* do not disclose and/or require a specific (optical, mechanical, and/or electronic) arrangement for collecting data, one having ordinary skill in the art at the time of the invention would reasonably interpret the unspecified arrangement for

collecting data of Reber *et al.* as any one of the known conventional arrangement for collecting data which would not require further description. Further, Gordon teaches (column 5, lines 28-31 and 64-67; column 8, lines 15-56; Fig. 1) a light beam path from a light source (8) to disc (1) that is co-extensive with a part of the light from the disc (1) to a detector (11) wherein the detected signal data are transferred to a computer via a means for sampling and digitizing the signals and that the detected object positions stored in a storage means are retrieved and used by a scanning means to position a means for optical inspection of detected objects (*i.e.*, "look again at specific region of interest"; column 5, lines 58-62; column 6, lines 4-10 and 19-32; column 7, line 55 to column 8, line 27) and how to precisely determine the angular position and the radial position (column 9, lines 15-23). Additionally, Ekins *et al.* teach (left column on pg. 1963) that as the area decreases, the signal/noise ratio increases and approaches a maximum value of 60 as the area falls below 0.01 mm^2 . It should be noted that a 0.01 mm^2 area has a diameter of $112 \text{ }\mu\text{m}$. In addition, Virtanen teaches (column 48, lines 41-63) that with proper software, optical disk readers are scanning confocal laser microscopes which allow the study and identification of the detailed structure of biological and other specimens (*e.g.*, to detect several different cell types). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a conventional optical arrangement (*e.g.*, an epifluorescence arrangement wherein a light beam path from a light source to specimen is co-extensive with a part of the fluorescence emitted from the specimen excited with a $20\text{-}150 \text{ }\mu\text{m}$ diameter light spot)

and conventional means for sampling and digitizing detector and position signals as the unspecified (optical, mechanical, and/or electronic) arrangement for collecting data in the apparatus of Reber *et al.*, in order to obtain fluorescence data having a desired signal/noise ratio from measurements of specimens along annular or spiral tracks by relative translation along a rotational radius suitable for storage and processing on a conventional computer with the capability to look at images of specific regions of interest (e.g., any desired target object) located at precisely determined angular and radial coordinates by simply adjusting confocal aperture sizes so as to identify several different types of cells.

In regard to claims **29**, **47**, and **49**, the cited prior art is applied as in claims 1 and 48 above.

In regard to claim **7** which is dependent on claim 1, Reber *et al.* also disclose (column 4, lines 17-28) that the member is positioned for rotation about an axis on the frame and wherein the means for rotating the member rotates the member about the axis.

In regard to claim **9** which is dependent on claim 1, Reber *et al.* also disclose (column 5, lines 1-9) that the scanning control means (e.g., processor 36) are adapted to control the scanning means in such a way that the non-linear curve is a substantially circular curve (e.g., circular 140 in Fig. 11).

The claim limitation "signal processing means operatively connected to the detector to detect a presence of an object based on the detector signals" is being treated under 35 U.S.C. 112, sixth paragraph and has been construed to cover the corresponding structure described in

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the specification (e.g., "Signal processing means may subsequently retrieve and use these corresponding coherent data sets to enhance the discrimination between signals originating from target objects and false positive signals" in lines 7-9 on pg. 11 and "The storage means may be located in a personal computer (PC), which is operationally connected with the apparatus of the present invention" in lines 8-9 on pg. 14) and equivalents thereof (MPEP § 2181).

In regard to claim **12** which is dependent on claim 1, Reber *et al.* also disclose (column 5, lines 1-22) signal processing means (e.g., processor 36) operatively connected to the detector (38) to detect a presence of an object based on the detector signals.

In regard to claims **23-25** which are dependent on claim 1, the apparatus of Reber *et al.* lacks that a mask is inserted in the optical path between the specimen and the detector, wherein the mask comprises at least one transparent aperture having a substantially rectangular shape with at least one dimension of the aperture, as projected on the specimen, between 0.75 and 2 times the dimensions of objects to be detected. Ekins *et al.* teach (left column on pg. 1964) that the highest signal/noise ratio is observed when the instrument field of view is restricted to a microspot area. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide an aperture in the apparatus of Reber *et al.* to restrict the field of view to substantially a microspot area (*i.e.*, matching size and shape), in order to detect fluorescent members with a desired signal/noise ratio.

In regard to claim **27** which is dependent on claim 1, the apparatus of Reber *et al.* lacks an explicit description of a coherent light source. However,

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Reber *et al.* also disclose (column 3, lines 56-60; column 4, lines 4-10) a CD-ROM or DVD reader. Since Reber *et al.* do not disclose and/or require a specific CD-ROM or DVD reader, one having ordinary skill in the art at the time of the invention would reasonably interpret the unspecified CD-ROM or DVD reader of Reber *et al.* as any one of the known conventional CD-ROM or DVD reader which would not require further description. Further, Gordon teaches (column 5, lines 28-31 and 64-67) that a conventional compact disc reader comprises a coherent light source. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a conventional CD-ROM or DVD reader (e.g., a CD-ROM reader comprising a coherent light source) as the unspecified CD-ROM or DVD reader in the apparatus of Reber *et al.*

In regard to claim 36 (which is dependent on claim 29), Reber *et al.* also disclose (column 5, lines 58-62) storage means (e.g., memory 49 or device 20) for storage of detector signals (related to the detected property) provided by the detector (38) and corresponding position signals (related to the current position of the member) provided by the scanning control means.

The claim limitation "means for sampling and digitising the detector signals and the position signals" is being treated under 35 U.S.C. 112, sixth paragraph and has been construed to cover the corresponding structure described in the specification (e.g., "Each of these digitised detector and position signals is, preferably, represented by a series of digital samples generated by one or several A/D-converters" in lines 13-15 on pg. 9) and equivalents thereof (MPEP § 2181).

In regard to claim **11** (which is dependent on claim 1) and claim **37** (which is dependent on claim 36), the apparatus of Reber *et al.* lacks an explicit description of means for sampling and digitizing the detector signals and the position signals. However, Reber *et al.* also disclose (column 3, lines 56-60; column 4, lines 4-10) a CD-ROM or DVD reader which provides signals for processing by a processor such as a computer (column 5, lines 1-22). Since Reber *et al.* do not disclose and/or require a specific data processing, one having ordinary skill in the art at the time of the invention would reasonably interpret the unspecified data processing of Reber *et al.* as any one of the known conventional data processing which would not require further description. Further, Gordon teaches (column 8, lines 15-56) to transfer detected signal data to a computer via a means for sampling and digitizing the signals. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide conventional data processing (*e.g.*, data processing comprising a means for sampling and digitizing the detector signals and the position signals) as the unspecified data processing in the apparatus of Reber *et al.*, in order to convert the data to a form suitable for processing by a computer.

In regard to claim **40** which is dependent on claim 1, Reber *et al.* also disclose (column 3, lines 39-47) that the marked objects are marked with a fluorescent stain.

In regard to claim **44** which is dependent on claim 1, the apparatus of Reber *et al.* lacks that the detector comprises a CCD device. Gordon teaches (column 10, lines 7-19) to provide a CCD device for scanning a disc in order to obtain higher speed and higher resolution. Therefore it would have been obvious to one having

ordinary skill in the art at the time of the invention to provide a CCD device as the detector in the apparatus of Reber *et al.*, in order to obtain higher speed and higher resolution.

In regard to claim **45** which is dependent on claim 40, the apparatus of Reber *et al.* lacks an explicit description that the fluorescent marker is Fluorescein. However, Reber *et al.* also disclose (column 3, lines 39-47) the detection of fluorescent members. Since Reber *et al.* do not disclose and/or require a specific fluorescent marker, one having ordinary skill in the art at the time of the invention would reasonably interpret the unspecified fluorescent marker of Reber *et al.* as any one of the known conventional fluorescent marker which would not require further description. Further, Ekins *et al.* teach (left column on pg. 1965) that fluorescein fluorescent markers (e.g., FITC) are commercially available. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a conventional fluorescent marker (e.g., Fluorescein) as the unspecified fluorescent marker in the apparatus of Reber *et al.*

4. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reber *et al.* (US 6,110,748) in view of Gordon (US 5,892,577), Ekins *et al.* (Multianalyte microspot immunoassay-microanalytical "compact disk" of the future, Clinical Chemistry, Vol. 37, no. 11 (1991), pp. 1955-1967), and Virtanen (US 6342349)

In regard to claims **15** and **16** which are dependent on claim 1, the modified apparatus of Reber *et al.* lacks an explicit description that the specimen has an area larger than 500 mm² (e.g., larger than 8000 mm²). However, Reber *et al.* also disclose

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(column 7, lines 59-62) a member such as a standard CD-ROM to receive and hold the specimen. Since Reber *et al.* do not disclose and/or require a specific CD-ROM, one having ordinary skill in the art at the time of the invention would reasonably interpret the unspecified CD-ROM of Reber *et al.* as any one of the known conventional CD-ROM which would not require further description. Further, Demers teaches (pg. 5, third paragraph) that a compact disc is a 5.5-inch disc. A $\sim 15328 \text{ mm}^2$ area has a diameter of $\sim 140 \text{ mm}$ (5.5 inch). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a conventional CD-ROM having $\sim 15328 \text{ mm}^2$ area as the unspecified CD-ROM in the modified apparatus of Reber *et al.* and that the $\sim 15328 \text{ mm}^2$ area of a conventional CD-ROM is capable of receiving and holding specimens of $\sim 15328 \text{ mm}^2$ area or less (e.g., larger than 500 mm^2 or 8000 mm^2).

Response to Arguments

5. Applicant's arguments filed 19 January 2007 have been fully considered but they are not persuasive.

Applicant argues (first paragraph on pg. 10 to first paragraph on pg. 11 of remarks filed 19 January 2007) that Reber *et al.* do not disclose a scanning control means as defined by the present claims (*i.e.*, scanning control means adapted for providing position data to a storage, wherein the position data is part of a data set also including detector data of the target object) since in the present invention, it is more like that there is a search for a missing person, where the person can be recognized on his appearance only, *i.e.* a needle in a haystack whereas Reber *et al.* and Virtanen are

basically visiting predetermined addresses in a city and asking who is living there, and how the person's condition is. Examiner respectfully disagrees that the combination of cited references do not teach or suggest scanning control means adapted for providing position data to a storage, wherein the position data is part of a data set also including detector data of the target object. Applicant indicate that Reber *et al.* and Virtanen are basically visiting predetermined addresses in a city and asking who is living there, and how the person's condition is. Thus the following information must be recorded: (a) address; (b) occupant of address; and (c) occupant's condition. For example, when there are two address A and B, the following information must be recorded after measuring potential occupants at each address: (A) data set 1: address A having occupant O is "yes" with condition "good"; and (B) data set 2: address B having occupant O is "no" with condition "N/A". Therefore, the combination of cited references do teach or suggest scanning control means adapted for providing position data (e.g., address A) to a storage, wherein the position data (e.g., address A) is part of a data set also including detector data (e.g., occupant O is "yes" with condition "good") of the target object.

Applicant argues (last paragraph on pg. 11 of remarks filed 19 January 2007) that one skilled in the art would not arrange a conventional microscope on the arm corresponding to the radially traveling arm in a CID player. Examiner respectfully disagrees. First it is noted that pending claims must be given their broadest reasonable interpretation consistent with the specification (MPEP § 2111) and the specification (pg. 14, lines 27-28) disclose that " ... the scanning control means may be adapted to place an

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automated microscope at the position of any desired target object". Thus microscope as recited in the claims is any one of the known microscopes such as a scanning confocal laser microscope which forms a viewable image by scanning. Further, Virtanen states (column 48, lines 41-56) that "Although they have not previously been so recognized or described, optical disk readers are, in essence, scanning confocal laser microscopes. As such, they can be used, with proper software, to study the detailed structure of biological and other specimens. Cell counting and cell shape measurement are two examples of these applications. FIG. 33 depicts one geometry, based upon this principle, useful for detecting eukaryotic cells. The detection of eukaryotic cells in the present invention is best performed by attaching, directly to the device substrate surface, a first structure capable of recognizing and binding to the desired cells, such as an antibody. A second structure capable of recognizing and binding to the desired cells, such as a second antibody, is attached directly to the surface of a signal responsive moiety, such as a metal microsphere". Thus Virtanen expressly teaches an optical disk reader is essentially a scanning confocal laser microscope. Virtanen further states (column 50, lines 1-3) that "By labeling the surface of cells relatively uniformly, their individual sizes and shapes can be measured by the optical disk drive functioning as a scanning confocal microscope". Thus Virtanen expressly teaches measuring cell size and cell shape by an optical disk drive functioning as a scanning confocal laser microscope. Therefore, there is no need to arrange a conventional microscope on the arm corresponding to the radially traveling arm in a CID player since the optical disk reader of Reber *et al.* can be adapted to view the image of the cells stained by e.g., signal responsive moieties (*i.e.*, the cells are made viewable by stains such as signal responsive moieties).

In response to applicant's argument (first paragraph on pg. 12 to last paragraph on pg. 14 of remarks filed 19 January 2007) that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (*i.e.* that the microscope provides a light spot having a diameter between 20-150 μm on the specimen and/or that the specimens are limited to typical cells in the range of 5-15 μm) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

6. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

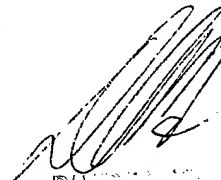
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shun Lee whose telephone number is (571) 272-2439.

The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SL


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